

MONTANA'S 'WINDUSTRY' POISED TO GROW

By Kyle Lehman

Montana is beginning to ramp up its efforts to capitalize on the energy potential carried in winds rolling off the Rockies and whipping east across its plains.

But it's been slow in coming. Despite Montana's No. 5 ranking in wind potential by the American Wind Energy Association,

statistics from the



The Judith Gap Wind Energy Center in Wheatland County, Montana, the state's largest wind farm, but perhaps not for long. Photo by Dave Morris

Department of Energy have Montana accounting for only 145 megawatts of wind power out of a total of 16,596 MW nationwide.

On Tuesday, Governor Brian Schweitzer announced that German wind turbine manufacturer Fuhrlander AG plans to construct a new manufacturing facility near Butte, with the expectation that turbine demand will greatly increase in the coming years.

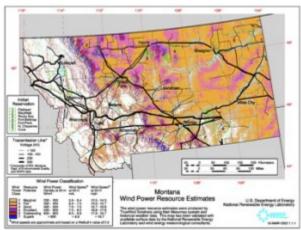
And this spring Spanish wind developer Naturener will begin construction on the first phase of a wind power facility near Shelby called McCormick Wind Farm. Once the second phase of the wind farm is complete, it will produce a total of 210 MW of electricity, more than doubling the state's current capacity. According to the governor's office, this is just one of as many as 50 potential projects, and if all were built, they'd produce some 4,000 MW of energy.

Bill Alexander, the chief developer for Naturener, notes several motives that brought his company to the Treasure State.

"You overlay a number of factors to determine where you build," he says. "There are a number of variables that all come together in Montana."

Alexander says Montana's potential is based not only on the strength of its wind, but the political and social support found in the state. The drawbacks are its distance from a load center and the lack of transmission to carry electricity to other markets.

Montana's lack of adequate transmission is a concern voiced by many associated with wind development in the state. Kathi Montgomery of the Montana Department of Environmental Quality says that in order to approach the state's wind potential, additional lines simply must be built. Montana's population alone will not provide a sufficient draw for any increase in electricity, she says, citing the fact that Montana is already a net exporter of electricity.



Click the image for a full-size map of Montana's wind power resource estimates created by the U.S. Department of Energy's National Renewable Energy Laboratory

But pipelines are in the pipeline.

One transmission project is the Calgary-based Montana Alberta Tie Line (MATL), a proposed 215-mile line stretching from near Lethbridge, Alberta to outside Great Falls, Montana. When completed, the line will provide an additional 300 MW of transmission in both directions. The privately funded project, currently in the final stages of regulatory approval, will allow for a variety of wind projects along its length and is being watched closely by those in the wind industry.

Another is TransCanada's NorthernLights project, which would include two lines -- one beginning in Montana, one in Wyoming -- running to Las Vegas, Nevada.

Meanwhile, state and federal goals and incentives are helping to drive more wind development.

About a year ago, the state legislature passed House Bill 3, dubbed the "Clean and Green" energy bill for its numerous incentives it offers to renewable power. Governor Schweitzer was the first to sign on to the nationwide 25X'25 initiative, an effort to pass federal legislation for 25 percent renewable energy by 2025. And in 2005, Montana approved a renewable energy portfolio standard that committed to meeting 15 percent of the state's energy with renewables by 2015.

"I'm sure the majority of our RPS (renewable power supply)" -- that 15 percent -- "will be met by wind," Montgomery says.

A similar initiative focused specifically on wind development is the Department of Energy's Wind Powering America (WPA) program. WPA aims to meet 20 percent of the nation's energy needs with wind by the year 2030.

According to Peggy Beltrone, a Cascade County Commissioner and member of the WPA, achieving this would require a 26-fold increase in the nation's current wind power capacity.

It's daunting, but Beltrone points to the significant amount of interest from international corporations looking at developing Montana's potential. In Cascade County alone, Beltrone says there are at least 13 anemometers (wind measuring devices) collecting data from potential development sites. Several companies have funded the \$75,000 devices, and in Beltrone's mind they stand as proof of the industry's commitment to the state.

"We know that people are serious...they're actually doing it," she says.

Beltrone has personally given tours to companies from as far away as Japan, Ireland and Germany. For Beltrone, these companies offer an economic boom to the rural areas of her county that have faced difficult times.

"The rural part of Cascade County has seen a slide in tax value...It's really important to think in terms of what these machines can do for tax values," she says.

Beltrone sees a strong interest in both residential and commercial wind among her constituents for reasons both economic and environmental. And at the DEQ Montgomery notices a similar public interest in wind development from landowners and citizens around the state.

"I spend more time explaining why we don't have more wind farms than defending the ones we have," Montomery says.

Despite the recent surge of interest in developing commercial wind power in Montana, the "windustry" is still far from becoming a dominant player. More than half of the state's current power capability of roughly 5,500 MW is met by coal power plants with hydropower a close second. Any one of the state's coal plants dwarfs the 135 MW Judith Gap Wind Energy Center in Wheatland County, Montana's largest wind facility.

But for Ann Gravatt of the Renewable Northwest Project (RNP), a Portland, Oregonbased coalition of renewable energy advocates, the utilization of Montana's wind has implications that reach far beyond the state and even the country.

"Montana's wind resource is too good of a resource not to be used if we are to solve global warming," she says.